

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

October 12, 2001

MEMORANDUM FOR: J. Kent Fortenberry, Technical Director
FROM: C. H. Keilers, Jr.
SUBJECT: Los Alamos Report for Week Ending October 12, 2001

Recommendations 94-1/2000-1: DNFSB staff members Contardi, Kasdorf, Leary (OE), and Plaue were on site this week reviewing nuclear material stabilization activities and planning. The staff was encouraged by both the increased DOE support and the increased DOE/LANL emphasis on applying sound project management principles to these activities. While both funding and the level of activity have increased recently, project planning is still highly preliminary. DOE and LANL were not ready to discuss with the staff the program specifics, such as target stabilization dates, by material category, that are being used for planning purposes (i.e., dates other than FY 2010 for completing stabilization). LANL expects to be ready for these discussions within a few months and to have a draft program execution plan with resource-loaded schedules in February 2002.

Since 1995, LANL has stabilized nearly 6,000 items and achieved a significant risk reduction. However, progress has been slow during the last 2 years, and the inventory to be stabilized has increased. About 90% of the stabilization progress occurred prior to FY 00. The extended TA-55 shutdown to address the March 2000 Type A event also slowed progress (site rep weekly 9/28/01).

Currently, LANL has about 5,600 items, programmatic and excess, that need to be stabilized and properly packaged or disposed as waste. A large fraction are in older, non-standard containers (i.e., not the drop-tested, screw-lid, vent-filtered design). The schedule problem is compounded by the fact that the LANL 94-1 budget fell nearly four-fold between FY 96 and FY 01 (\$15.1M and \$3.9M, respectively), causing processing lines to be idled and experienced personnel to be transferred to other programs. While DOE recently provided supplemental funding (\$6.8M), it is likely that renewing processing and increasing qualified staffing without impacting other projects will be critical path.

The staff observed that LANL continues to study a multitude of options. Besides end date (per LANL, FY 2010), the risk reduction profile with time may be a useful measure for weighing these options. It appears worthwhile now to aggressively pursue options with the least programmatic uncertainty and work toward maximal and efficient campaigning of materials. The staff also continues to believe that the process vs discard decision for materials can be streamlined, possibly by taking advantage of lessons learned at other sites (e.g. RFETS). The container surveillance program could also be improved to increase confidence in container integrity and provide a basis for assumptions being made about the impact of aging on older packages and materials. The priority of processing legacy vs new residues continues to merit examination. The staff will continue to work closely with DOE and LANL to address these and other questions on accelerating LANL stabilization activities.

Emergency Operations Center (EOC) Replacement Project: On October 2nd, DOE approved the performance baseline (CD-2), the project execution plan, and the start of construction (CD-3) for the EOC Replacement Project. LANL is pursuing a design-build acquisition strategy. The seismic requirements are those for Performance Category 2 (PC-2, i.e., an essential facility) with ductile detailing and with base shear loads set by using a reduced ductility factor (doubles the seismic load). PC-2 loads are also being used for systems important to EOC operation.